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RESEARCH ARTICLE

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Notulae to the Italian native vascular flora: 7

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Abstract

In this contribution, new data concerning the distribution of native vascular flora in Italy are presented. It includes new records, confirmations and status changes to the Italian administrative regions for taxa in the genera *Acer*, *Alchemilla*, *Andrachne*, *Bromus*, *Clinopodium*, *Colchicum*, *Damasonium*, *Erodium*, *Festuca*, *Hieracium*, *Hyparrhenia*, *Ipomoea*, *Linaria*, *Lolium*, *Narcissus*, *Ranunculus*, *Sisymbrium*, *Stipa*, *Valerianella*, *Vicia*, and *Zannichellia*. New combinations in the genus *Ziziphora* (*Z. sardoa* and *Z. corsica*) and the new subspecies *Ulmus minor* susbp. *canescens* are proposed. Furthermore, the name *Calamintha alpina* var. *sardoa* is here lectotypified. Nomenclatural and distribution updates, published elsewhere, and corrigenda are provided as Suppl. material 1.

Keywords

Floristic data, Italy, new combination, new subspecies, nomenclature, typification

How to contribute

The text for the new records should be submitted electronically to Chiara Nepi (chiara.nepi@unifi.it). The corresponding specimen along with its scan or photograph have to be sent to FI Herbarium: Sezione di Botanica "Filippo Parlatore" del Museo di Storia Naturale, Via G. La Pira 4, 50121 Firenze (Italy). Those texts concerning nomenclatural novelties (typifications only for accepted names), status changes, exclusions, and confirmations should be submitted electronically to: Fabrizio Bartolucci (fabrizio.bartolucci@gmail.com). Each text should be within 2,000 characters (spaces included).

Floristic records

Acer pseudoplatanus L. (Sapindaceae)

+ (NAT) **SAR:** Status change from casual to naturalized for the flora of Sardegna.

This species has a European-Caucasian distribution (Pignatti 2017b). It is native to Italy and is common in all Administrative Regions, with the exception of Sardegna (Bartolucci et al. 2018a), where it has been reported as casual alien. It was introduced in reforestations since the first half of the 20th century. This species was first reported in the island by Veri and Bruno (1974) for the Limbara massif (NE Sardegna). They reported it both as native and cultivated. Later, this species has been considered only as a cultivated casual alien. In some mountain areas of central and northern Sardegna, it is widespread and locally colonizes woodlands and reforestation sites. It is common on the Limbara and Gennargentu massifs where it occurs in garrigues, heaths, clearings, rocky places, and reforestations, with trees of different ages, while in the Marghine-Goceano it is mainly represented by saplings and seedlings, which locally invade some sites such as the old yew forest, a Regional Natural Monument, known as Sos Nibberos.

G. Bacchetta, G. Calvia

Alchemilla alpigena Buser ex Hegi (Rosaceae)

+ **TOS:** da M. Lancino verso il Libro Aperto (Pistoia), crinale, 3° poggio (WGS84: 44.154167N, 10.711944E), rupi, 1820 m, 19 July 2016, Leg. *G. Gestri*, Det. *F. Festi* (PI No. 008786); Doganaccia-Passo Calanca (Pistoia), incrocio strada-sentiero (WGS84: 44.120000N, 10.774722E), 1670 m, 18 August 2016, Leg. *G. Gestri*, Det. *F. Festi* (PI No. 008788). – Species confirmed for the flora of Toscana.

This species was considered as doubtful for the Region (Bartolucci et al. 2018a), despite a recent record published by Buccomino and Tondi (2010) for Monte La Nuda, about 40 km NW of the present records.

G. Gestri, B. Pierini, L. Peruzzi, S.E. Fröhner, F. Festi

Alchemilla incisa Buser (Rosaceae)

+ **EMR:** Appennino tosco-emiliano, a N di Fonte Uccelliera (WGS84: 44.101389N, 10.848611E), fra i mirtilli, ca. 1780 m, 20 July 2016, Leg. *G. Gestri*, Det. *F. Festi* (PI No. 010386). – Species new for the flora of Emilia-Romagna.

This species was recorded for the same area (but in Tuscan territory) by Arrigoni (2018b).

G. Gestri, B. Pierini, L. Peruzzi, S.E. Fröhner, F. Festi

Alchemilla pallens Buser (Rosaceae)

+ **EMR:** dallo Scaffaiolo verso il Passo dello Strofinatoio (WGS84: 44.114756N, 10.816248E), 1650 m, 18 June 2016, Leg. *G. Gestri et C. Gavazzi*, Det. *S.E. Fröhner* (PI No. 008804). – Species confirmed for the flora of Emilia-Romagna.

This species was doubtfully recorded for the Region (Bartolucci et al. 2018a).

G. Gestri, B. Pierini, L. Peruzzi, S.E. Fröhner, F. Festi

Alchemilla strigosula Buser (Rosaceae)

+ **TOS:** Monte Falterona (Firenze), Passo della Calla (WGS84: 43.833611N, 11.733611E), prato, ca. 1290 m, 29 May 2016, Leg. *G. Gestri et C. Gavazzi*, Det. *F. Festi* (PI No. 010472). – Species confirmed for the flora of Toscana.

This species was doubtfully recorded for the Region (Arrigoni 2018b, Bartolucci et al. 2018b), although it is generically reported as very common for the central and southern Apennines by Festi (2017).

G. Gestri, B. Pierini, L. Peruzzi, S.E. Fröhner, F. Festi

Alchemilla subcrenata Buser (Rosaceae)

+ **TOS:** Alpi Apuane, Minucciano (Lucca), tra Carcaraia e Passo della Focolaccia (WGS84: 44.168333N, 10.204167E), 1200–1600 m, 19 July 2016, Leg. *L. Peruzzi, G. Bedini, J. Muller et G. Trombetti*, Det. *S.E. Fröhner* (PI No. 011182). – Species new for the flora of Toscana.

This species is only generically reported as very common for the central and southern Apennines by Festi (2017).

G. Gestri, B. Pierini, L. Peruzzi, S.E. Fröhner, F. Festi

Alchemilla tenerrima S.E.Fröhner (Rosaceae)

+ **EMR:** da M. Lancino a Libro Aperto, 2° poggio (WGS84: 44.156667N, 10.730278E), crinale, 19 July 2016, Leg. *G. Gestri*, Det. *F. Festi* (PI No. 008822). – Species new for the flora of Emilia-Romagna.

This species is only generically reported for the "Appennino pistoiese" (Apennines in the area of Pistoia, Toscana) by Festi (2017).

G. Gestri, B. Pierini, L. Peruzzi, S.E. Fröhner, F. Festi

Alchemilla venosula Buser (Rosaceae)

+ **TOS:** Pratomagno (Arezzo), cima M. Secchieta (WGS84: 43.716944N, 11.589167E), prato, ca. 1440 m, 21 June 2016, Leg. *C. Gavazzi, G. Gestri, B. Pierini*, Det. *S.E. Fröhner* (PI No. 011178); Pratomagno (Arezzo), fra Varco di Reggello e M. Secchieta (WGS84: 43.697778N, 11.607778E), fosso, 1400 m, 21 June 2016, Leg. *C. Gavazzi, G. Gestri, B. Pierini*, Det. *S.E. Fröhner* (PI No. 011177); Pratomagno (Arezzo), lungo la strada di Secchieta (WGS84: 43.732222N, 11.575278E), 1400 m, 22 June 2016, Leg. *B. Pierini et G. Gestri* Det. *S.E. Fröhner* (PI No. 011180); Appenino pistoiese, Cutigliano (Pistoia), NW Passo Calanca (WGS84: 44.123056N, 10.800278E), ca. 1650 m, 16 August 2016, *G. Gestri*, Det. *S.E. Fröhner* (PI No. 011171). – Species new for the flora of Toscana.

This is the second record of this rare species for peninsular Italy, where it was so far known only for Lazio, in the sector of Monti della Laga (Di Pietro et al. 2016; Festi 2017).

G. Gestri, B. Pierini, L. Peruzzi, S.E. Fröhner, F. Festi

Andrachne telephioides L. (Phyllanthaceae)

+ C **TOS:** Grosseto (Grosseto), stazione ferroviaria di Grosseto (WGS84: 42.767200N, 11.106615E), massicciata di un binario morto, 11 m, 28 September 2018, *G. Ferretti, M. Mugnai* (FI). – Cryptogenic species new for the flora of Toscana.

This species shows a wide Mediterranean distribution, but it is considered alien to France (Tison and de Foucault 2014). It has been recorded as native mostly in central and southern Italy and as extinct in Liguria, but until now it has never been reported for Toscana (Bartolucci et al. 2018a). The records for Liguria seemingly derive from individuals collected in natural environments and date back to the end of the 1800s (Tammaro and Pogliani 1977). We retrieved an abundant population at Grosseto railway station, showing mature fruits and clear signs of seed dispersal. Notwithstanding these evidences and its native status in Italy, we opted for a cryptogenic status for Toscana, considering that there are no previous records for this Region and that the context in which the plants have been collected is far from being a natural environment. Indeed, this population may be the result of an accidental introduction along the railways, from natural populations in Lazio. Accordingly, further studies are necessary to assess the native status of this species also in Toscana.

M. Mugnai, L. Lazzaro, G. Ferretti

Bromus hordeaceus L. subsp. *thominei* (Hardouin) Braun-Blanq. (Poaceae)

+ **TOS:** San Rossore (Pisa), pineta di *Pinus pinea* L. su suolo sabbioso (WGS84: 43.720294N, 10.321115E), 0–5 m s.l.m., 5 May 2015, *G. Bonari* (FI); Parco della

Maremma (Grosseto), pineta di *Pinus pinea* L. su suolo sabbioso (WGS84: 42.649897N, 11.060141E), 0–5 m s.l.m., 18 May 2015, *G. Bonari* (FI); Parco della Maremma (Grosseto), pineta di *Pinus pinea* L. su suolo sabbioso (WGS84: 42.651296N, 11.059456E), 0–5 m s.l.m., 20 May 2015, *G. Bonari* (FI). – Subspecies new for the flora of Toscana.

Scholz (2008), unlike Smith (1980) and Tison and de Foucault (2014), reported the base of the awn as flattened and rather stout for this subspecies (similarly to *B. hordeaceus* subsp. *molliformis* (J.Lloyd ex Billot) Maire & Weiller). This deviant information may have created some confusion, leading to an underestimation of the distribution of *B. hordeaceus* subsp. *thominei* in Italy.

E. Banfi, G. Bonari

Clinopodium nepeta (L.) Kuntze subsp. *nepeta* (Lamiaceae)

+ **SAR:** Burcei (Cagliari), Cantoniera Ovile Cannas, ambiente ruderale e area circostante (WGS84: 39.332100N, 9.429200E ± 50 m), 208 m, 29 August 2018, *G. Mereu* (FI). – Subspecies confirmed for the flora of Sardegna.

The occurrence of this taxon in Sardegna had been generically indicated by Arrigoni (2013), but regarded as doubtful in Bartolucci et al. (2018a).

G. Mereu

Colchicum corsicum Baker (Colchicaceae)

+ **ITALIA (SAR):** Bultei (Sassari), località Sa Fraigada, schiarite boschive in ambiente fresco, esposizione a nord (WGS84: 40.516400N, 9.067900E ± 150 m), 935 m, 3 June 2018 (bulb and leaves); *ibidem*, 30 September 2018 (flowers), *G. Mereu* (FI). – Species confirmed for the flora of Italy (Sardegna).

The previous reports of this species in Sardegna (e.g., Camarda 1990) correspond to *Colchicum verlaqueae* Fridl. (Fridlender 2009), a littoral Sardinian endemic (Maddalena archipelago, Spargi, San Pietro, Pirastru-Vignola). The identification of the samples of *C. corsicum* was based on the descriptions by Baker (1879) and Fridlender (2009, 2014a) and also by comparison with the lectotype at K (K barcode K000464097!). *Colchicum corsicum* is thus added to the rather long list of Sardinian-Corsican endemic species, confirming the ancient link between the two islands.

G. Mereu

Colchicum longifolium Castagne (Colchicaceae)

+ **LOM:** Cecima (Pavia), Cascina Monte, davanti all'"Agriturismo Ca' del Monte" (WGS84: 44.81659N, 9.07412E), 689 m, prateria xerofila, su arenaria, 20 April 2017, Leg. *F. Polani*, Det. *N.M.G. Ardenghi* (*Herb. N. Ardenghi*); *ibidem*, 9 September 2017,

diffuso anche sul lato E del "Planetario e Osservatorio Astronomico Ca' del Monte" (WGS84: 44.81440N, 9.07933E), Leg. *F. Polani*, Det. *N.M.G. Ardenghi* (FI, *Herb. N. Ardenghi*); *ibidem*, 17 September 2017, Leg. *F. Polani*, Det. *N.M.G. Ardenghi* (*Herb. N. Ardenghi*). – Species new for the flora of Lombardia.
+ **PIE:** Gremiasco (Alessandria), ca. all'altezza di Cascina Monte di Cecima (Pavia) (WGS84: 44.81657N, 9.07320E), 690 m, prateria xerofila, su arenaria, 9 September 2017, diffuso anche sul lato S del "Planetario e Osservatorio Astronomico Ca' del Monte" di Cecima (WGS84: 44.81440N, 9.07812E), Leg. *F. Polani*, Det. *N.M.G. Ardenghi* (FI). – Species confirmed for the flora of Piemonte.

This species was recently reported from different localities of the Ligurian Alps and the Ligurian Apennines in western Liguria (Persson 2009; Pignatti 2017a), and it is here recorded for the northeastern portion of the latter mountain range in Lombardia and Piemonte. A large population (characterized by tepals with white apex and dark brown tunics, the main morphological features separating *C. longifolium* from *C. neapolitanum* (Ten.) Ten., see Selvi 2009) has been detected along the crest between the Staffora and Curone valleys, growing mainly in dry grasslands and on the fringe of mixed *Quercus pubescens* Willd. subsp. *pubescens* woodlands.

F. Polani, N.M.G. Ardenghi

Damasonium bourgaei Coss.

+ **SAR:** Status change from naturalized to native for the flora of Sardegna.

This taxon is native to Basilicata, Puglia, and Sicilia (Bartolucci et al. 2018a). In Sardegna, Martinoli (1950) reported this species from Capo S. Elia (Cagliari), and recently Rich and Nicholls-Vuille (2001) confirmed its presence for the island, especially in the southern part. Our research in the Herbarium of Cagliari (CAG) demonstrated its presence in 2009 at Cava Monte Pira, Bolotana (Nuoro) (Leg. *F. Mascia*) and at Badde Pirastu in 2014, Teulada (southern Sardegna) (Leg. *G. Bacchetta, M. Fois*). Bartolucci et al. (2018a) evaluated the status of this species in Sardegna as naturalized alien, possibly due to a misprint.

G. Bacchetta, G. Calvia, L. Podda

Erodium alnifolium Guss. (Geraniaceae)

+ **LAZ:** Santa Marinella (Roma), Loc. Prato Cipolloso (WGS84: 42.073220N, 11.870662E), 232 m s.l.m., prateria sovrappascolata su suolo argilloso superficiale, su versante esposto ad Est. 19 May 2018, *G. Zangari* (FI); Civitavecchia (Roma), Loc. Fontanile della Vecchia (WGS84: 42.092250N, 11.844583E), 219 m s.l.m., prateria a cotico eterogeneo su suolo argilloso superficiale, su versante esposto ad Ovest, 24 May 2018, *G. Zangari* (UTV No. 37307); Barbarano Romano (Viterbo), Loc. Banditella (WGS84: 42.249242N, 12.059044E), 390 m s.l.m., pascolo al margine di boscaglia,

16 May 2003, *F. Mazzenga* (UTV No. 22242, sub *E. malacoides* (L.) L'Hér.); Università Agraria di Tolfa (Roma), Loc. Trocione (WGS84: 42.060720N, 11.992200E), 277 m s.l.m., pascolo arido, 1 June 1988, *A. Scoppola* (UTV No. 12396, sub *E. malacoides* (L.) L'Hér.). – Species new for the flora of Lazio.

Erodium alnifolium is a western Mediterranean species, similar to *E. malacoides* (L.) L'Hér. and *E. chium* (L.) Willd., with which it is often confused (Pignatti 2017b). According to Bartolucci et al. (2018a), this species occurs in Emilia-Romagna, Toscana, Abruzzo, Molise, Puglia, Basilicata, Sicilia, and Sardegna, while it is no longer recorded in Campania and doubtfully occurring in Calabria. All the records, both from the field and from UTV herbarium, were collected within the "Tolfetano-Cerite-Manziate" Natura 2000 SPA. There, *E. alnifolium* was found in intensely grazed grasslands on dry clay soils.

G. Zangari, L. Cancellieri, A. Scoppola

Festuca rubra L. subsp. *juncea* (Hack.) K.Richt. (Poaceae)

+ (NAT) **SAR:** Tempio Pausania (Sassari), Monte Limbara, zona sommitale sotto il tornante del sambuco, gariga, nel ciglio stradale, 1300 m (WGS84: 40.511140N, 09.102044E), 17 July 2010, *G. Calvia* (Herb. Calvia, Berchidda); Tempio Pausania (Sassari), Monte Limbara, zona antenne RAI, scarpate, cigli stradali, 1300 m (WGS84: 40.511160N, 09.102385E), 6 July 2013, *G. Calvia* (Herb. Calvia, Berchidda); Tempio Pausania (Sassari), Vallicciola, graniti. Prati, radure, cigli stradali (WGS84: 40.849839N, 09.152562E) 1050 m, 24 June 2017, *G. Calvia* (FI; Herb. Calvia, Berchidda). – Naturalized regional alien species new for the flora of Sardegna.

This is a European taxon, typical of mountain areas (Pignatti 2017a). It is native to Italy, where it is widespread in many Regions (Bartolucci et al. 2018a). In Sardegna, it was first collected in 2010 close to the communication station of P. Balistreri, on the top of Mt. Limbara (NE Sardegna), in a far from natural environment. Recently, it has been spreading in other areas of the massif, and is now sparsely diffuse between 1,000 and 1,330 m a.s.l., along roads, slopes, garrigues, and meadows, normally growing close to disturbed places.

G. Calvia

Hieracium pseudogrovesianum Gottschl. subsp. *opertum* Gottschl. (Asteraceae)

+ **BAS:** Fardella (Potenza), tra Fosso Carceri e Piano di Iannace (WGS84: 39.943725N, 16.188962E), faggeta, 1591 m, 23 June 2016, Leg. *A. Stinca et R. Pennesi*, Det. *G. Gottschlich* (FI, PORUN-Herb. Stinca, CAME); Terranova di Pollino (Potenza), tra Piano di Iannace e Serra di Crispo (WGS84: 39.936568N, 16.201584E), faggeta, 1773 m, 23 June 2016, Leg. *A. Stinca et R. Pennesi*, Det. *G. Gottschlich* (PORUN-Herb. Stinca, CAME). – Subspecies new for the flora of Basilicata.

Hieracium pseudogrovesianum subsp. *opertum* is endemic to Italy and recorded so far only for Abruzzo (Gottschlich 2009). Therefore, our finding represents an important extension of its distribution range in Italy.

A. Stinca, R. Pennesi, G. Gottschlich

Hieracium tolstoii Fen. & Zahn (Asteraceae)

– **TAA.** Species to be excluded from the flora of Trentino-Alto Adige.

Hieracium tolstoii was described by Fenaroli and Zahn (1927) on specimens collected on the walls of the Sforza castle in Milan. Its presence in Trentino-Alto Adige was reported by Gottschlich and Pujatti (2000) for the Santa Barbara castle (Lodrone), based on a sample collected by Luzzani in 1931. We revised the only specimen collected by Luzzani and stored at Collegio Arcivescovile in Trento, and we attributed it to *Hieracium sabaudum* L. Accordingly, *Hieracium tolstoii* should be excluded from the flora of Trentino-Alto Adige. These two species look similar, but they can be distinguished by stem leaves bluish-green and involucral bracts with dense stellate hairs in *H. tolstoii* vs. stem leaves dark green and involucral bracts lacking stellate hairs in *H. sabaudum* (Orsenigo et al. 2019).

EX **ITALIA (LOM):** Species extinct in Lombardia and Italy.

Hieracium tolstoii is endemic to Italy (Peruzzi et al. 2014, 2015; Orsenigo et al. 2018), where it was reported only for Lombardia and Trentino-Alto Adige (see above). Field research carried out in its *locus classicus* (the walls of the Sforza castle in Milan; Fenaroli and Zahn 1927), allowed us to exclude the current presence of this species in Lombardia and to consider it as extinct at global level.

S. Orsenigo, G. Gottschlich, F. Prosser, G. Galasso

Hyparrhenia sinaica (Delile) Llauradó ex G.López (Poaceae)

+ **UMB:** Arrone (Terni), su calcare (ca. WGS84: 42.584881N, 12.769024E), 250 m s.l.m., Esp. S., 5 June 1989, *I. Bonini, G. Fontana* (SIENA sub *Bothriochloa ischaemum* (L.) Keng.). – Species new for the flora of Umbria.

E. Banfi, T. Fiaschi, G. Bonari

Ipomoea imperati (Vahl) Griseb. (Convolvulaceae)

+ **CAL:** Gizzeria (Catanzaro), ZSC "LAGHI LA VOTA" (WGS84: 38.94124N, 16.18061E), 1 m s.l.m., dune sabbiose, 29 June 2018, Leg. *Morabito, Musarella, Prigoliti, Settineri, Spampinato,* Det. *Musarella et Spampinato* (FI, REGGIO). – Species new for the flora of Calabria.

Ipomoea imperati is a thermo-cosmopolite species widespread in temperate and tropical areas of Central and North America, Asia, Pacific Islands, Australia, Canary

Islands, the Azores, and in the Mediterranean (Silvestre 2012, Cennamo et al. 2013). Recent molecular investigations suggest that *I. imperati* is a native species in the Mediterranean (Cennamo et al. 2013). In Italy, it is present only in Sicilia, while in Campania (i.e., the *locus classicus* of this species) is considered Extinct (Turrisi 2001, 2005; Bartolucci et al. 2018a, as *I. stolonifera*, see Suppl. material 1). A few individuals were found among patches of *Convolvulus soldanella* L.

C.M. Musarella, A. Morabito, G. Spampinato

Linaria dalmatica (L.) Mill. (Plantaginaceae)

+ **PUG:** Gravina in Puglia (Bari), Lame Maiorani (WGS84: 40.920284N, 16.332436E), 625 m s.l.m., pascolo roccioso, 23 September 2018, Leg. et Det. *G. Pazienza* (BI Nos. 42058, 42059, 42060). – Species confirmed for the flora of Puglia.

Linaria dalmatica was discovered in Puglia during the 19th century (Palanza 1900), exclusively at Gravina (Bari). It was reported by Bartolucci et al. (2018a) as no longer recorded for the Region.

G. Pazienza, F. Carruggio, V. Cavallaro

Lolium apenninum (De Not.) Ardenghi & Foggi (Poaceae)

+ **LOM:** Piazzale della 1a cantoniera dello Stelvio, 1800 m, suolo calcareo, 7 July 1920, Leg. M. Longa, Rev. *N.M.G. Ardenghi* (PAV sub *Festuca pratensis* Huds.); Prati di Gobetta e piazzale 1ª Cant.ra Stelvio, 1200–1800, *sine data*, Leg. *M. Longa*, Rev. *N.M.G. Ardenghi* (PAV sub *Festuca pratensis* Huds. Massara sub nom. *F. elatior*); Alpe Lago in Valmalenco (Sondrio), 1600 m, rive torbose del lago, 22 August 1984, Leg. *A. Pirola, V. Credaro*, Rev. *N.M.G. Ardenghi* (PAV sub *Festuca pratensis* Hudson); Madesimo (Sondrio), Valcava, presso il càrden del Giardino Alpino Valcava (WGS84: 46.45415N, 9.35437E), 1860 m, margine tra prateria e campetto di patate, 26 July 2018, Leg. *G. Rossi*, Det. *N.M.G. Ardenghi* (FI). – Species confirmed for the flora of Lombardia.

Up to now, the presence of *Lolium apenninum* in Lombardia was regarded as doubtful (Bartolucci et al. 2018a), based on a record by Chenevard (1915; see also Martini et al. 2012) from Bergamo. The linked herbarium voucher, stored at BER-Rota ("Selve ombrose e prati = umidi presso Bergamo", *sine data*, *L. Rota* sub *Festuca pratensis* Huds.?), has recently been verified and it actually pertains to *L. pratense* (Huds.) Darbysh. Yet, historical specimens of genuine *L. apenninum* from Valtellina were discovered in PAV-Lombardo and a population from Valchiavenna was sampled in 2017 and 2018, thus confirming the regional presence of this species, already recorded from nearby Switzerland (Tyler et al. 1978; Kopecký et al. 2016). Further research in this part of the Alps may improve our knowledge of the distribution of *L. apenninum*, traditionally confused, or even merged, with *L. pratense* (Huds.) Darbysh. (Ardenghi and Foggi 2015).

N.M.G. Ardenghi, G. Rossi

Narcissus tazetta L. subsp. *aureus* (Loisel.) Baker (Amaryllidaceae)

+ (CAS) **LAZ:** Ferentino (Frosinone) (WGS84: 41.66242N, 13.25104E), bordo strada, 190 m, 09 March 2018, *E. Fanfarillo* (FI). – Casual regional alien species new for the flora of Lazio.

The presence of this taxon in Lazio was doubtful, while it is considered native to Toscana and Campania, and a casual alien in Marche (Bartolucci et al. 2018a). The present record refers to individuals escaped from cultivation, as this species is frequently cultivated in flowerbeds.

E. Fanfarillo

Nuphar lutea (L.) Sm. (Nymphaeaceae)

+ **SAR:** Status change from casual alien to native for the flora of Sardegna.

Nuphar lutea is a Eurasian hydrophyte, which is typical of oligotrophic and still waters. It is common in many regions of northern and central Italy, while it is rare in southern Italy and islands (Pignatti 2017a). According to Conti et al. (2005) and Arrigoni (2006), this species was considered native for Sardegna, but it has been recently reported as casual alien (Bartolucci et al. 2018a), probably due to a misprint.

G. Bacchetta, G. Calvia

Ranunculus peltatus Schrank (Ranunculaceae)

+ **TOS:** Padule di Fucecchio, La Cavallaia (Firenze), loc. Giardino (WGS84: 43.779482N, 10.814862E), 5 May 2018, *L. Lastrucci, V. Macchi, G. Riccioni* (FI No. FI052890); Fucecchio (Toscana), June 1939, *R. Pichi Sermolli* (FI). – Species confirmed for the flora of Toscana.

This species has been reported as doubtfully present for Toscana (Bartolucci et al. 2018a), although several ancient and recent records for this Region are known both on the basis of the presence of herbarium samples and bibliographic information (Baroni 1897; Lastrucci et al. 2007; Arrigoni 2018a; Peruzzi and Bedini 2018). It should be noted that several records for the Fucecchio Marsh have been reported in the past as *Ranunculus aquatilis* L. (see Tomei and Guazzi 1995; Arrigoni 2018a). In FI, two specimens from the Fucecchio Marsh stored as *R. aquatilis* were found. The first one, collected by U. Martelli in the second half of the 19th century, is incomplete and impossible to identify. The second one, collected by R.E.G. Pichi Sermolli in June 1939 and not originally identified by the collector, can be attributed to *R. peltatus* based on the length of the peduncles.

L. Lastrucci

Ranunculus rionii Lagger (Ranunculaceae)

+ **LOM:** Lombardia, Menaggio (Como), Lago di Como (WGS84: 46.026107N, 9.238882E), August 2018, *R. Bolpagni* (FI No. FI055105). – Species new for the flora of Lombardia.
+ **TOS:** Toscana, prov. di Grosseto, comprensorio di Capalbio. Piccolo stagno adiacente al Lago Acquato (WGS84: 42.485861N, 11.453187E), 20 June 2018, *L. Lastrucci, G. Ferretti* (FI No. FI053668). – Species new for the flora of Toscana.

For Italy, this species can be found in Trentino-Alto Adige, considered doubtful for Veneto, and recorded by mistake for Valle d'Aosta (Bartolucci et al. 2018a). Concerning the ancient record from Torri del Benaco (Garda Lake), Pignatti (1982) hypothesized the possible disappearance of this species from the site. In the site from Lombardia, this species is quite rare, recorded along the littorals of Menaggio (Como Province), where it sparsely grows in areas dominated by *Potamogeton perfoliatus* L. and *P. gramineus* L. at depths ranging from 2 to 5 m. In the site from Toscana, this species is rather abundant in the shallow waters of the few open water bodies of the Lake Acquato, a wetland almost completely occupied by marsh vegetation, and near the shore of a small pond close to the lake.

L. Lastrucci, B. Foggi, G. Ferretti, R. Bolpagni

Sisymbrium polyceratium L. (Brassicaceae)

+ **PUG:** Bari (Bari), Lungomare San Girolamo (WGS84: 41.137720N, 16.823124E), vegetazione sinantropica nei pressi del mare, 1 m, 26 April 2018, *R. Labadessa* (BI Nos. 40486, 42063). – Species confirmed for the flora of Puglia.

Sisymbrium polyceratium is distributed in southern Europe and it is known for the majority of Italian Regions, with the exception of the northernmost ones, while it has no longer been recorded in Liguria, Emilia-Romagna, Calabria, and Puglia (Bartolucci et al. 2018a). In particular, this species has not been found in Puglia since the second half of the 19th century, when it was indicated for the area of Barletta (Bruni 1857).

R. Labadessa, L. Forte

Stipa capillata L. (Poaceae)

+ **BAS:** Matera (Matera), Murgia Timone (WGS84 40.673616N, 16.629670E), 420 m s.l.m., prateria xerica submediterranea a *Stipa austroitalica*, 13 October 2018, *L. Forte* (FI). – Species new for the flora of Basilicata.

Stipa capillata is one of the most widely distributed species of the genus, being present from Spain to eastern Siberia (Freitag 1985), with a central range extending from eastern Romania to eastern Kazakhstan (Wagner et al. 2011). In Italy, this species is reported from Piemonte to Trentino-Alto Adige in the north, and in Umbria, Lazio, Abruzzo, Molise, and Puglia in the centre and south (Bartolucci et al. 2018a).

L. Forte, R. Labadessa, V. Tomaselli

Valerianella discoidea (L.) Loisel. (Valerianaceae)

+ **TOS:** Galenda, Gaiole in Chianti (Siena), su un muretto a secco a bordo di un bosco di roverella (WGS84: 43.450239N, 11.37004E), 505 m s.l.m., 29 May 2018 *C. Angiolini* (FI). – Species confirmed for the flora of Toscana.

C. Angiolini, S. Cannucci

Vicia johannis Tamamsch. (Fabaceae)

+ **ABR:** Lama dei Peligni (Chieti), vicino all'Orto Botanico, pascoli aridi, 600 m, 18 May 1996, *A. Manzi* (APP no. 12659); Barisciano (L'Aquila), San Colombo, pascolo, 1088 m, 26 April 2002, *F. Conti* (APP no. 27783); Capestrano (L'Aquila), Fiume Tirino, incolti, 21 April 1998, *A. Manzi* (APP no. 28078); Carapelle Calvisio (L'Aquila), pascoli, 870 m, 15 May 2004, *A. Manzi* (APP no. 32209); Barisciano (L'Aquila), San Colombo, margine boschivo, 2011, *F. Conti* (APP no. 56097); Acciano (L'Aquila), M. Offermo, incolti aridi, 30 May 2018, *F. Conti, F. Bartolucci* (APP no. 59830). – Species new for the flora of Abruzzo.
+ **LAZ:** Campoli Appennino (Frosinone), ex coltivi, esp. S, 850 m, 25 May 1997, *F. Minutillo* (APP No. 39929). – Species confirmed for the flora of Lazio.
+ **MOL:** Scapoli (Iserna), M. Falconara, versante settentrionale, siepi, 600 m, 25 April 1998, *F. Conti, F. Minutillo* (APP no. 33753). – Species new for the flora of Molise.

This species was so far known in Italy only for Veneto and Emilia-Romagna (Bartolucci et al. 2018a), and generically reported from Lazio and Sardegna (Schäfer 1973; Bennett and Maxted 1997). *Vicia johannis* was confused in central Italy with *V. narbonensis* L., from which it is easily distinguished for the background colour of the standard (cream to yellow vs. violet to deep purple), for the wings showing violet or brown veins and wing spots (vs. ± concolorous corollas, lacking distinct spots on wings), and for the upper leaves showing leaflets usually 2-paired (vs. usually 3-paired) (Birch et al. 1985; Schäfer 1973; Tison and de Focault 2014).

F. Bartolucci, F. Conti

Zannichellia pedunculata Rchb. (Potamogetonaceae)

0 **PUG:** In Apulia, s.d., *G. Gasparrini*, Rev. *S. Pignatti*, 1953 as *Z. palustris* L. subsp. *pedicellata* (Wahl. et Rosen) Hegi (PAV-Gasparrini, under the name *Ruppia maritima Zannichella* [*sic*] *palustris*). – Species not recently confirmed for the flora of Puglia.

Zannichellia pedunculata is a subcosmopolitan species, reported for most of the Italian territory, with the exception of north-western and south-eastern Regions (Bartolucci et al. 2018a). A single herbarium specimen from "Apulia" was found in PAV-Gasparrini, collected by Guglielmo Gasparrini (1804–1866) probably around 1830, before becoming professor of botany in Pavia in 1857, where he transferred most of his

collections (Alippi Cappelletti 1999). The specimen was later revised as *Z. palustris* L. subsp. *pedicellata* (Wahlenb. & Rosén) Arcang. by Sandro Pignatti, who indexed the Gasparrini herbarium in Pavia in the early 1950s.

N.M.G. Ardenghi, G. Rossi

Zannichellia peltata Bertol. (Potamogetonaceae)

+ **EMR:** Bologna, periferia nord-ovest, Lungo il Canale Ghisiliera; 50 m, noexp (WGS84: 44.5068N, 11.3193E), 31 August 2018, Leg. et Det. *A. Alessandrini*, Confirm. *L. Lastrucci* (FI). – Species new for the flora of Emilia-Romagna.

This species is known (Bartolucci et al. 2018a) for southern Italy (ascertained in Basilicata and Sicilia, to be confirmed in Lazio and Calabria). In the collection site, *Z. peltata* grows abundantly along the running shallow waters of a canal about 2-m wide. The collected specimens were identified mainly using the key published by Talavera and Garcia-Murillo (2010). We paid particular attention to the length of stamen filaments in the male flower and to the separation of female and male flowers in different nodes along the stem. A broad revision of herbarium materials belonging to *Z. palustris* s.l. is advisable, in order to check the possible presence of further samples of *Z. peltata* in other Italian localities.

A. Alessandrini, L. Lastrucci

Nomenclatural novelties

Ulmus minor L. subsp. *canescens* Bartolucci & Galasso, subsp. nov.

urn:lsid:ipni.org:names:60478977-2

–*Ulmus canescens* Melville, Kew Bull. 12(3): 499(–502, figs. 1–2). 1958 (1957 publ. 17 January 1958), *nom. inval.*
–*Ulmus minor* Mill. subsp. *canescens* Browicz & Ziel., Fragm. Florist. Geobot. 23(2): 145. 1977. [end of August 1977], *nom. inval.*
–*Ulmus minor* Mill. subsp. *canescens* Browicz & Ziel., Arbor. Kórnickie 22: 320. 1978. [1977 publ. January 1978], *nom. inval.*

Holotype: [Greece]. Thrace, Karakeuy, 17 May 1932, *H.G.Tedd 806* (K barcode K000852646!).

Description: Melville in Kew Bull. 12(3): 499. 1958.

The name "*Ulmus canescens*" was not validly published by Melville (1958), because three gatherings, from the same place but on different dates, were cited as "holotype" (Arts. 8 and 40 of the ICN, Turland et al. 2018). Currently, *Ulmus canescens* is treated at subspecific rank (e.g., Browicz and Zieliński 1982; Christensen 1997; Uotila 2011; Dimopoulos et al. 2013; Barina et al. 2018; Bartolucci et al. 2018a) under the invalid combination "*U. minor* subsp. *canescens* (Melville) Browicz & Ziel.". We propose

a new subspecies based on Melville's description and designating a single specimen, within the original material "*H.G.Tedd 806*" cited by Melville (traced at K, barcodes K000852646!, K001328097!, K001328098!, K001328099!, K001328100!), as the holotype (see also Art 46.4 of the ICN).

F. Bartolucci, G. Galasso

Ziziphora sardoa (Asch. & Levier) Bartolucci, Galasso & Bräuchler, comb. nov.
urn:lsid:ipni.org:names:60478978-2

≡ *Calamintha alpina* (L.) Lam. var. *sardoa* Asch. & Levier, Fl. Sard. Comp.: 234. 1884–1885 ≡ *Acinos sardous* (Asch. & Levier) Arrigoni, Boll. Soc. Sarda Sci. Nat. 22: 288. 1983 [31 October 1983] ≡ *Satureja sardoa* (Asch. & Levier) Greuter & Burdet, Med-Checkl. 3: 325 1986. [1 September 1986] ≡ *Clinopodium alpinum* (L.) Kuntze subsp. *sardoum* (Asch. & Levier) Govaerts, World Checkl. Seed Pl. 3(1): 16. 1999 ≡ *Clinopodium sardoum* (Asch. & Levier) Peruzzi & F.Conti, Inform. Bot. Ital. 40(2): 264. 2008 [31 December 2008]

Lectotype (designated here): [ITALY]. Sardegna: S'Atha e Bidda, 16 May 1884, *Forsyth Major 52* (FI barcode FI055680!).

Acinos Mill. and *Ziziphora* L. form a group separate from *Clinopodium* s.str. in the phylogenetic trees reconstructed from plastid and nuclear ribosomal markers (Bräuchler et al. 2010). A close morphological relationship between the two genera (López and Bayer 1988) and lack of a clear separation in their phylogeny suggests that the two genera should be merged. As a consequence, we here include *Acinos* in *Ziziphora*, while they were regarded as part of *Clinopodium* L. by Bartolucci et al. (2018a). The taxa belonging to the genus *Ziziphora* occurring in Italy (Bartolucci et al. 2018a; Galasso et al. 2018) are: *Z. acinos* (L.) Melnikov subsp. *acinos* [≡ *Clinopodium acinos* (L.) Kuntze subsp. *acinos*], *Z. granatensis* (Boiss. & Reut.) Melnikov subsp. *granatensis* [= *Clinopodium alpinum* (L.) Kuntze subsp. *meridionale* (Nyman) Govaerts], *Z. granatensis* subsp. *alpina* (L.) Bräuchler & Gutermann [≡ *C. alpinum* (L.) Kuntze subsp. *alpinum*], *Z. graveolens* (M. Bieb.) Melnikov [≡ *C. graveolens* (M.Bieb.) Kuntze], *Z. suaveolens* (Sm.) Melnikov [≡ *Clinopodium suaveolens* (Sm.) Kuntze], *Ziziphora villosa* (Pers.) Melnikov [*Clinopodium acinos* (L.) Kuntze subsp. *villosum* (Pers.) Peruzzi & F.Conti] and the alien taxon *Z. capitata* L. subsp. *capitata*. *Clinopodium alpinum* (L.) Kuntze subsp. *nebrodense* (A.Kern. & Strobl) Bartolucci & F.Conti [≡ *Calamintha nebrodensis* A.Kern. & Strobl] and *C. minae* (Lojac.) Peruzzi & F.Conti [≡ *Calamintha minae* Lojac.] are taxa of doubtful taxonomic value, and they are regarded here as synonyms of *Z. granatensis* (Boiss. & Reut.) Melnikov subsp. *granatensis*, pending further studies. A new combination for the Corsican endemic *Clinopodium corsicum* (Pers.) Govaerts under *Ziziphora* is proposed: *Ziziphora corsica* (Pers.) Bräuchler, comb. nov. (urn:lsid:ipni.org:names:77197998-1) (≡ *Thymus corsicus* Pers., Syn. Pl. [Persoon] 2(1): 131. 1806 [November 1806])

F. Bartolucci, G. Galasso, C. Bräuchler

Nomenclatural and distribution updates from other literature sources, and corrigenda

Nomenclatural and distribution updates according to Caruel (1860), Zahn (1916), Zangheri (1966), Caputo (1967), La Valva and Sabato (1983), Moraldo et al. (1988), López González (1992, 1994), Vergari et al. (1996), Rich and Nicholls-Vuille (2001), Arrigoni (2003, 2016, 2017, 2018a, 2019), Viciani et al. (2008, 2013), Anzalone et al. (2010), Carine and Robba (2010), Lastrucci et al. (2007, 2010, 2016, 2017), Selvi (2010), Aghababyan (2011), Kurtto et al. (2013), Talavera et al. (2013), Fridlender (2014b), Tison and de Foucault (2014), Iamonico and Managlia (2015), Ali et al. (2016a, 2016b), Arrigoni et al. (2016), Hauenschild et al. (2016), Roccia et al. (2016), Pignatti (2017b), Uhlemann (2017), Bamonte (2018), Bellone et al. (2018), Bergfeld (2018), Bottinelli et al. (2018), Bovio (2018), Bräuchler (2018), De Santis (2018a, 2018b), Ellmouni et al. (2018), Lazzeri et al. (2018), Oberprieler et al. (2018), Ottonello and Longo (2018), Perrino et al. (2018), Peruzzi et al. (2018), Polidori et al. (2018), Rosati et al. (2018), Secchi and Longo (2018), Troia et al. (2018), Bartolucci et al. (2019), Benedí (2019), Bonali (2019), Conti et al. (2019), Cresti et al. (2019), Govaerts (2019), Groom et al. (2019), Gutermann (2019), Gutiérrez-Larruscain et al. (2019), Maggioni and Alessandrini (2019), Ramírez et al. (2019), Thiv et al. (2019), Wahlsteen and Tyler (2019) and corrigenda to Bartolucci et al. (2018a) are provided in Suppl. material 1.

F. Bartolucci, G. Galasso

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Supplementary material 1

Supplementary material

Authors: Fabrizio Bartolucci, Gabriele Galasso

Data type: species data

Explanation note: 1. Nomenclatural updates, 2. Distribution updates, 3. Synonyms, misapplied or included names.

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